

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

### **Listing of Claims:**

1-41 (cancelled)

42. (Currently amended) A computer-implemented method of managing a process, said computer implemented method comprising:

identifying activities that comprise the process;

identifying measurable drivers associated with a cost for each of the activities;

identifying bridge variables, wherein each bridge variable is a driver that is

relevant to more than one of said activities;

establishing a relationship between various drivers by representing each non-

bridge variable driver in terms of one or more of said bridge variables

only;

using said relationship, representing each of said activities at least as a function of

one or more of said bridge variables, thereby reflecting interdependence

between said activities; ~~and~~

generating a model of said process at least as a function of said bridge variables

by combining representations of all activities comprising said process;

and.

outputting, from said model, a predictive cost for the process.

43. (Previously presented) The computer-implemented method of claim 42, further comprising:

- selecting a plurality of constraints,
- and wherein generating said model of said process includes generating said model as a function of said bridge variables and said plurality of constraints.

44 (Previously presented) The computer-implemented method of claim 43, further comprising:

- optimizing said model in view of said plurality of constraints using one of the following:

- a linear programming algorithm,
  - a mixed-integer linear programming algorithm, and
  - a mixed-integer nonlinear programming algorithm; and
- reconstructing a physical representation of said activities and said drivers using said optimized model.

45. (Previously presented) The new computer-implemented method of claim 44, wherein said reconstructing includes calculating a value of each non-bridge variable driver using values of corresponding bridge variables only, and calculating a value of each said activity using values calculated for each bridge variable driver and non-bridge variable driver of said activity.

46. (Previously presented) The computer-implemented method of claim 44, further comprising:

revising said model using the results from said optimization step.

47. (Previously presented) The computer-implemented method of claim 43, wherein

selecting said plurality of constraints includes setting economic and non-economic constraints.

48. (Previously presented) The computer-implemented method of claim 42, wherein identifying measurable drivers include identifying economic and non-economic drivers.

49. (Previously presented) The computer-implemented method of claim 42, wherein identifying said drivers includes identifying at least one of fixed and variable components of each said driver, and wherein said method further comprising:

costing each said measurable driver for said at least one of fixed and variable components thereof.

50. (Currently amended) A system comprising:

a computer;

input and output devices in communication with said computer; and

a memory encoded with a computer program, which, when executed by said computer,

causes said computer to perform the following:

allow a user to identify activities that comprise a process,  
further allow said user to identify measurable drivers associated with a  
cost for each of the activities,  
identify bridge variables, wherein each bridge variable is a driver that is  
relevant to more than one of said activities,  
establish a relationship between various drivers by representing each non-  
bridge variable driver in terms of one or more said bridge variables  
only,  
using said relationship, present each of said activities at least as a function  
of one or more of said bridge variables, thereby reflecting  
interdependence between said activities, and  
generate a model of said process at least as a function of said bridge  
variables by combining representations of all activities comprising  
said process; and  
output, from said model, a predictive cost for the process.

51. (Previously presented) The system of claim 50, wherein said computer program,  
upon execution by said computer, causes said computer to further perform the  
following:  
further allow said user to select a plurality of constraints;  
incorporate said plurality of constraints in said model of said process;  
optimize said model in view of said plurality of constraints using one of the  
following:

a linear programming algorithm,  
a mixed-integer linear programming algorithm, and  
a mixed-integer nonlinear programming algorithm; and  
reconstruct a physical representation of said activities and said drivers using said optimized model.

52. (Previously presented) The system of claim 51, wherein said computer program, upon execution by said computer, causes said computer to perform said reconstruction by calculating a value of each non-bridge variable driver using values of corresponding bridge variables only and by calculating a value of each said activity using values calculated for each bridge variable drivers and non-bridge variable driver of said activity.

53. (Currently amended) A computer-readable data storage medium containing program instructions, which, when executed by a processor, cause said processor to perform the following:

allow a user to identify activities that comprise a process;  
further allow said user to identify measurable drivers associated with a cost for each of the activities;  
identify bridge variables, wherein each bridge variable is a driver that is relevant to more than one of said activities;  
establish a relationship between various drivers by representing each non-bridge variable driver in terms of one or more of said bridge variables only;

using said relationship, represent each of said activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities; ~~and~~  
generate a model of said process at least as a function of said bridge variables by combining representations of all activities comprising said process; and output, from said model, a predictive cost for the process.

54. (Previously presented) The storage medium of claim 53, wherein said program instructions, upon execution, cause said processor to further perform the following:

further allow said user to select a plurality of constraints;  
include said plurality of constraints in said model of said process; and  
optimize said model in view of said plurality of constraints using one of the following:  
a linear programming algorithm,  
a mixed-integer linear programming algorithm, and  
a mixed-integer nonlinear programming algorithm; and  
revise said model using the results from optimizing said model.

55. (Previously presented) The storage medium of claim 53, wherein said program instructions, upon execution, cause said processor to reconstruct a physical representation of said activities and said drivers by calculating a value of each non-bridge variable driver using values of corresponding bridge variables only and by calculating a value of

each said activity using values calculated for each bridge variable driver and non-bridge variable driver of said activity.

56. (Previously presented) The storage of claim 53, wherein said program instructions, upon execution, cause said processor to cost each said driver-identified by said user.